UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,793	08/03/2004	Bogdan Kasztenny	153527	4792

23413 7590 11/19/2008

CANTOR COLBURN, LLP
20 Church Street
22nd Floor
Hartford, CT 06103

EXAMINER	
TABONE JR, JOHN J	
ART UNIT	**PAPER NUMBER**
2117	

NOTIFICATION DATE	DELIVERY MODE
11/19/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

Office Action Summary	Application No.	Applicant(s)	
	10/710,793	KASZTENNY ET AL.	
	Examiner	Art Unit	
	JOHN J. TABONE JR	2117	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claim 1-43 are pending in the application and have been examined.

2. The objections to the drawings, abstract and claims as well as the 35 USC § 112, second paragraph rejections have been withdrawn by the Examiner due to Applicants' arguments and amendments filed 10/31/2008.

Response to Arguments

3. Applicant's arguments with respect to claims 1 and 43 have been considered but are moot in view of the new ground(s) of rejection.

As per the arguments that the “only "prior art" disclosed is the "TRADITIONAL DFR/SOE RECORDER 22"” the Examiner disagrees and asserts that the only block that is NOT prior art in Fig. 1 is the communications based DFR/SOE 30. Applicants' own disclosure states in paragraph [0016]:

> “Referring to FIG. 1, an electrical power distribution system 10 is depicted with a plurality of transmission lines 12 extending from one of three bus lines 14. Each transmission line includes one or more of a current transformer (CT), a voltage transformer (VT), a circuit breaker (CB), and may include a TeleProtection (TP) device that links some of all of the terminals of the line, in communication with a protection and control (P&C) device 20. The prior art discussed above includes a traditional digital fault recorder (DFR) and sequence of events (SOE) recorder 22 (shown with phantom lines) in communication with a plurality

> of CTs, VTs, CBs, TPs, and P&Cs 20 to record corresponding information therefrom."

This clearly discloses to one skilled in the art that all the components "except" the communications based DFR/SOE 30. Therefore, the Examiner asserts that the communications based DFR/SOE 30 is the alleged invention and will be examined as such.

Concerning Fig. 2, Applicants' own disclosure states in paragraph [0022], "The DAU 34, DIU 38, and SU 42 are presently known as parts of existing DFR and SER devices 22 (the prior art DFR/SER). Also, it is well known in the art that prior art DFR/SER devices have a CPU (CPU 50) and non-volatile memory (In order to meet common requirements, any DFR or SER uses non-volatile memory storage (MSU 52), paragraph [0029]). As such, the alleged invention of Fig. 2, as interpreted by the Examiner is PAU 44.

Specification

4. The disclosure is objected to because of the following informalities: The statement made in Applicants' disclosure in paragraph [0013] "FIG. 1 depicts a typical application of a digital fault recorder (DFR) and a sequence of events (SOE) recorder" could be understood as stating that Fig. 1 is prior art. Applicants have argued that Fig. 1 is not prior art and the Examiner is willing to give Applicants the benefit of the doubt, however, this statement must be changed to refer to an embodiment of the current invention.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-12, 15-17 and 30-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior Art, hereinafter **AAPA**, in view of **Vandiver** (US-6795789), hereinafter Vandiver.

Claims 1 and 43:

Note: The DAU 34, DIU 38, and SU 42 (of Fig. 2) are presently known as parts of existing DFR and SER devices 22. (¶ [0022]).

AAPA teaches a method and an apparatus (**traditional digital fault recorder (DFR) and sequence of events (SOE) recorder 22**) for recording analog signals and digitally encoded information associated with primary devices of an electric power system and secondary devices associated with the electric power system, the method comprising: receiving a plurality of analog output signals from corresponding transducers of the electric power system (**data acquisition unit (DAU) 32 capable of interfacing with physical signals including voltage signals 34 from the VTs and current signals 36 from the CT**); receiving a plurality of ON/OFF status signals from the primary and secondary devices of the electric power system (**digital input unit (DIU) 38 capable of interfacing with the ON/OFF signals 40**); receiving at least one

of a time-synchronization analog signal from a time synchronization source and a time-synchronization data packet from the time synchronization source over a communication medium (**synchronization unit (SU) 42 capable of synchronizing the device 30 to an externally provided reference clock**); maintaining an internal clock synchronized with the synchronization source for time synchronization (**SU 42**); sampling and digitizing the analog output signals (**DAU 32**); monitoring at least one of a status and a change of status of the ON/OFF status signals (**DIU 38**); analyzing both the plurality of analog output signals and digitally encoded information signals using a triggering algorithm (**central processing unit (CPU) 50**).

AAPA does not explicitly teach "receiving digitally encoded information signals as incoming data packets from a substation protection and control communication network via a communication port" and "decoding and analyzing the content of the incoming data packets". However, **AAPA** does teach [i]n the past few years digital protection and control devices, or even instrument transformers, have emerged to work with power system signals that are not in the form of physical or analog quantities, but in the form of digital data packets exchanged over appropriate communication channels. (¶ [0006]). **Vandiver** teaches in an analogous art communications based testing of a single intelligent electronic device. Instead of relay outputs being used to simulate the status of primary or secondary substation equipment during the simulated power system fault or other conditions, data packets containing status information are constructed by the test device 202 and sent to the tested device 204 over a communications link 206. Data packets received from the device under test 204 over the communication link 206

are used to monitor the operation of the device under test 204 (receiving digitally encoded information signals as incoming data packets from a substation protection and control communication network via a communication port). (Col. 4, ll. 40-57). **Vandiver** also teaches a digital representation of simulated current and voltage waveforms is transmitted in place of the actual analog signals. Decoding of the digital representation may either be performed by a conversion device coupled to the device under test (decoding and analyzing the content of the incoming data packets). (Col. 7, ll. 47-54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **AAPA's** prior art DFR and SER device 22 to add the communications based abilities of **Vandiver's** test device 202. The artisan would be motivated to do so because enable **AAPA's** prior art DFR and SER device 22 to decode and analyze the digital data packets exchanged over appropriate communication channels, ¶ [0006]).

As such **AAPA** in view of **Vandiver** teaches storing the digitized analog output signals and digitally encoded information signals together with corresponding timing information in a record as fault and sequence of events records in a non-volatile memory storage medium of a hosting device (**In order to meet common requirements, any DFR or SER uses non-volatile memory storage**, **AAPA** ¶ [0029]).

Claim 2:

AAPA teaches at least one digitally encoded information signal related to at least one of the electric power system and the secondary devices is recorded (**In the past few years digital protection and control devices, or even instrument transformers,**

have emerged to work with power system signals that are not in the form of physical or analog quantities, but in the form of digital data packets exchanged over appropriate communication channels, ¶ [0006]).

Claim 3:

AAPA in view of **Vandiver** teaches the receiving digitally encoded information signals includes independently time tagging each incoming data packet for the record (**If a communication message is received over the digital communication link, the test device 202 time stamps the received message at step 318, Vandiver**; Fig. 5, col. 6, ll. 45-48).

Claim 4:

AAPA in view of **Vandiver** teaches reception of the digitally encoded information signals is recorded even if an incoming data packet is corrupted. (**If a communication message is received over the digital communication link, the test device 202 time stamps the received message at step 318, Vandiver**; Fig. 5, col. 6, ll. 45-48).

Claim 5:

AAPA teaches copies of a same incoming data packet are recorded if at least one of a re-transmit and an auto-repeat scheme is in place (**it is quite common to re-send the same information several times in order to make sure the information arrives at the intended destination**, ¶ [0006]).

Claim 6:

AAPA teaches the incoming data packets are encrypted packets recorded in their original encrypted form (**it is quite common to re-send the same information**

several times in order to make sure the information arrives at the intended destination; channel integrity messages may be exchanged to monitor the communication means; and check-sums or other security means (i.e. encrypted packets) **may be attached to the body of the message to ensure integrity of the data**, ¶ [0006]).

Claim 7:

AAPA does not explicitly teach "the encrypted packets are deciphered from their original encrypted form in real-time and stored in a decrypted form". However, **AAPA** does teach check-sums or other security means (i.e. encrypted packets) may be attached to the body of the message to ensure integrity of the data. (¶ [0006]). It would have been obvious to one of ordinary skill in the art at the time the invention was made that AAPA's encrypted packets would be deciphered. The artisan would be motivated to do so because deciphering the original encrypted form in real-time and storing them in a decrypted form is well known in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 8:

AAPA teaches auxiliary information contained in the data packet includes at least one of CRC and sequence numbers and is stored as a part of the record (**check-sums or other security means** (i.e. encrypted packets) **may be attached to the body of the message to ensure integrity of the data**, ¶ [0006]).

Claim 9:

AAPA in view of **Vandiver** teaches time-synchronization data packets facilitating the time synchronization over the communication medium are time tagged and recorded (**If a communication message is received over the digital communication link, the test device 202 time stamps the received message at step 318, Vandiver**; Fig. 5, col. 6, ll. 45-48).

Claim 10:

AAPA teaches existence and configuration of devices producing the digitally encoded information signals to be recorded is recognized automatically based on supported by an applied communication protocol (**In the past few years digital protection and control devices, or even instrument transformers, have emerged to work with power system signals that are not in the form of physical or analog quantities, but in the form of digital data packets exchanged over appropriate communication channels. Such communication channels include, but are not limited to, direct fiber optic connections, Ethernet** (communication protocol)**, and serial ports, for example**, ¶ [0006]).

Claim 11:

AAPA in view of **Vandiver** teaches a health status of the communication medium used to transport a content of the digitally encoded information signals is monitored via at least one of a hardware and software means, and detected problems are time tagged and recorded as a part of the record. (**Vandiver**; col. 4, ll. 1-7).

Claim 12:

AAPA in view of **Vandiver** teaches a percentage usage of the communication medium used to transport the digitally encoded information signals is monitored via at least one of hardware and software means, and recorded as a part of the record (Data packets received from the device under test 204 over the communication link 206 are used to monitor the operation of the device under test 204, col. 4, ll. 53-56).

Claim 15:

AAPA in view of **Vandiver** teaches a health status of the corresponding analog transducer is recorded with the analog output signal of the corresponding transducer.

Claim 16:

AAPA in view of **Vandiver** teaches the time synchronization of the internal clock is achieved based on the incoming data packets instead of a dedicated time synchronization analog signal (**Vandiver; FIG. 8 is also helpful to illustrate synchronization of an applied test stimulus with a subsequent response from the devices under test**, col. 9, ll. 12-49).

Claim 17:

AAPA in view of **Vandiver** teaches the incoming packets used to synchronize the internal clock share a communication port with the incoming data packets (**FIG. 8 is also helpful to illustrate synchronization of an applied test stimulus with a subsequent response from the devices under test**, col. 9, ll. 12-49).

Claim 30:

AAPA in view of **Vandiver** teaches number of selftests are performed continuously or periodically in order to monitor integrity of the hosting device (Fig. 5 and discussion therein).

Claim 31:

AAPA teaches the hosting device is configured to report internal problems absent a power supply connected therewith in that [i]n order to meet common requirements, any DFR or SER uses non-volatile memory storage, which does not lose it's contents when power is interrupted to the memory. (**AAPA** ¶ [0029]).

Claim 32:

AAPA in view of **Vandiver** teaches the *hosting* device is capable of initiating communication with one of a higher order system (**AAPA, Fig. 1, Substation P&C Com. Networks**) and a device based (**AAPA, P&C device 20**) on pre-defined conditions, the pre-defined conditions include at least one of high memory utilization and self-test error.

Claim 33:

AAPA teaches the hosting device is configured to retrieve the record and change a configuration of the hosting device via at least one of public, proprietary SCADA, and substation integration protocols in that [i]n the past few years digital protection and control devices, or even instrument transformers, have emerged to work with power system signals that are not in the form of physical or analog quantities, but in the form of digital data packets exchanged over appropriate communication channels. Such communication channels include, but are not limited to, direct fiber optic connections,

Ethernet, and serial ports, for example. (¶ [0006]). Also, applicants' disclosure refers to these as common communication protocols (¶ [0024]).

Claim 34:

The limitation "a storing rate for both the analog and digitally encoded information signals is different for different channels corresponding to different physical inputs and different communication ports" would have been obvious to one of ordinary skill in the art at the time the invention was made and considered an obvious design choice that would not be beyond the scope of **AAPA** in view of **Vandiver**. The artisan would be motivated to do so because removable memories art common in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 35:

The limitation "a storing rate for both the analog and digitally encoded signals is dynamic and controlled via user-definable conditions" would have been obvious to one of ordinary skill in the art at the time the invention was made and considered an obvious design choice that would not be beyond the scope of **AAPA** in view of **Vandiver**. The artisan would be motivated to do so because removable memories art common in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 36:

AAPA in view of **Vandiver** teaches the hosting device simultaneously supports a multitude of communication protocols for the digitally encoded information signals over

a single or multiple communication ports (**the use of the terms local area network and wide area network to illustrate how the system communicates is not intended to imply that the illustrative system requires any specific type of communications network. Rather any of a variety of networks may be employed in practicing the technique described herein**, **Vandiver;** col. 4, ll. 1-7).

Claim 37:

AAPA in view of **Vandiver** teaches the hosting device supports primary and secondary communication ports in that In order to analyze what is happening to the bit stream between any two ports (**the use of the terms local area network and wide area network to illustrate how the system communicates is not intended to imply that the illustrative system requires any specific type of communications network. Rather any of a variety of networks may be employed in practicing the technique described herein**, **Vandiver;** col. 4, ll. 1-7).

Claim 38:

AAPA in view of **Vandiver** teaches recording the digitally encoded signals separately for the primary and secondary ports.

Claim 39:

AAPA teaches creating separate records for various groups of the digitally encoded signals based on a logical organization of the communication medium in that digital protection and control devices, or even instrument transformers, have emerged to work with power system signals that are not in the form of physical or analog quantities, but in the form of digital data packets exchanged over appropriate communication

channel (digitally encoded signals based on a logical organization of the communication medium). (¶ [0006]). Also, the MSU 52 provides permanent storage for the recorded signals. In order to meet common requirements, any DFR or SER (i.e. prior art DFR or SER) uses non-volatile memory storage (MSU 52, creating separate records for various groups). (¶ [0029]).

Claim 40:

AAPA in view of **Vandiver** teaches sending and receiving a test message intended to monitor at least one of integrity and quality of the communication medium (**Data packets received from the device under test 204 over the communication link 206 are used to monitor the operation of the device under test 204 in order to change states of the simulation as a function of the device operation**, **Vandiver ;** Col. 4, ll. 53-56).

Claim 41:

AAPA in view of **Vandiver** teaches one of the primary and secondary devices sends and another echoes back the test message, wherein comparison of the sent and echoed messages allows monitoring parameters of the communication medium (**it is quite common to re-send the same information several times** (echoes back the test message) **in order to make sure the information arrives at the intended destination; channel integrity messages may be exchanged to monitor the communication means**, **AAPA**; ¶ [0006]).).

Claim 42:

AAPA in view of **Vandiver** teaches recording and overlaying (**the MSU 52 provides permanent storage for the recorded signals. In order to meet common requirements, any DFR or SER (i.e. prior art DFR or SER) uses non-volatile memory storage**, AAPA ¶ [0029]) with at least one of power system signals (**Fig. 2, Voltage Signals 34 or Current Signals 36**), selected video and audio signals available as digital packets (**Data packets received from the device under test 204 over the communication link 206 are used to monitor the operation of the device under test 204 in order to change states of the simulation as a function of the device operation**, **Vandiver ;** Col. 4, ll. 53-56), and signals related to monitoring electric power system (**Fig. 2, ON/OFF signals 40**).

6. Claims 13, 14, 18-25, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior Art, hereinafter **AAPA**, in view of **Vandiver** (US- 6795789), hereinafter Vandiver, in further view of **Chattopadhyay** (US-20020103772), hereinafter Chattopadhyay.

Claim 13:

AAPA does not explicitly teach "the digitally encoded information signals are received via a wireless port". However, **AAPA** does teach [i]n the past few years digital protection and control devices, or even instrument transformers, have emerged to work with power system signals that are not in the form of physical or analog quantities, but in the form of digital data packets exchanged over appropriate communication channels. Such communication channels include, but are not limited to, direct fiber optic

connections, Ethernet, and serial ports, for example. (¶ [0006]). **Chattopadhyay** teaches in an analogous art the network interface 34 is a wireless interface with a transmitter for transmitting data over a wireless network (the digitally encoded information signals are received via a wireless port) via one of the communications links 40 using Code Division Multiple Access (CDMA). Alternatively, the network interface 34 may use any suitable wireless or wired transmission protocols and techniques to communicate over a wireless or wired network. (p. 2, ¶ [0024]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify AAPA's communication channels to use **Chattopadhyay's** wireless network interface 34. The artisan would be motivated to do so because wireless networks are well known in the art for transferring data because of their versatility and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 14:

AAPA in view of **Vandiver** in further view of **Chattopadhyay** teaches a health status of the wireless communication medium used to transport a content of the digitally encoded information signals is monitored via at least one of a hardware and software means, and detected problems are time tagged and recorded as a part of the record (**Data packets received from the device under test 204 over the communication link 206 are used to monitor the operation of the device under test 204 in order to change states of the simulation as a function of the device operation**, **Vandiver ;** Col. 4, ll. 53-56).

Claim 18:

AAPA does not explicitly teach "the memory storage medium is removable without disassembling the hosting device in which it is employed". However, **AAPA** does teach [i]n order to meet common requirements, any DFR or SER uses non-volatile memory storage. (**AAPA** ¶ [0029]). **Chattopadhyay** teaches in an analogous art [t]he computer 90 may also include fixed or movable storage media such as a magnetic computer disk, CD-ROM, or other suitable media to either receive output from, or provide output to, the servers 52, 54, or 56 or the clients 70. (p. 3, ¶ [0038]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **AAPA's** non-volatile memory storage used in the prior art DFR or SER to be removable as in **Chattopadhyay's** movable storage media. The artisan would be motivated to do so because removable memories are common in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 19:

The limitation "the record of the memory storage medium is preserved for access through a separate reading device" would have been obvious to one of ordinary skill in the art at the time the invention was made and considered an obvious design choice that would not be beyond the scope of **AAPA** in view of **Vandiver** in further view of **Chattopadhyay**. The artisan would be motivated to do so because removable memories are common in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 20:

The limitation "the memory storage medium is removable and insertable with the hosting device being powered on" would have been obvious to one of ordinary skill in the art at the time the invention was made and considered an obvious design choice that would not be beyond the scope of **AAPA** in view of **Vandiver** in further view of **Chattopadhyay**. The artisan would be motivated to do so because removable memories are common in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 21:

The limitation "the removable memory medium comprises of two or more independent storage units" would have been obvious to one of ordinary skill in the art at the time the invention was made and considered an obvious design choice that would not be beyond the scope of **AAPA** in view of **Vandiver** in further view of **Chattopadhyay**. The artisan would be motivated to do so because removable memories are common in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 22:

The limitation "a recording function of the hosting device are retained during removal and insertion of the removable memory medium" would have been obvious to one of ordinary skill in the art at the time the invention was made and considered an obvious design choice that would not be beyond the scope of **AAPA** in view of **Vandiver** in further view of **Chattopadhyay**. The artisan would be motivated to do so

because removable memories are common in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 23:

The limitation "the memory medium has no part thereof movable relative to any other part thereof" would have been obvious to one of ordinary skill in the art at the time the invention was made and considered an obvious design choice that would not be beyond the scope of **AAPA** in view of **Vandiver** in further view of **Chattopadhyay**. The artisan would be motivated to do so because removable memories are common in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 24:

The limitation "the removable memory medium is encrypted and readable only after providing appropriate security information" would have been obvious to one of ordinary skill in the art at the time the invention was made and considered an obvious design choice that would not be beyond the scope of **AAPA** in view of **Vandiver** in further view of **Chattopadhyay**. The artisan would be motivated to do so because removable memories are common in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 25:

The limitation "the removable memory medium is internally tested upon insertion and before use thereof" would have been obvious to one of ordinary skill in the art at the

time the invention was made and considered an obvious design choice that would not be beyond the scope of **AAPA** in view of **Vandiver** in further view of **Chattopadhyay**. The artisan would be motivated to do so because removable memories are common in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Claim 29:

AAPA in view of **Vandiver** in further view of **Chattopadhyay** teach the hosting device is controlled wirelessly for at least one of configuration changes, record management, and other supported functions. (**Chattopadhyay**; p. 2, ¶ [0024]).

7. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior Art, hereinafter **AAPA**, in view of **Vandiver** (US- 6795789), hereinafter Vandiver, in further view of **Shima** (US-5808587), hereinafter Shima.

Claims 26-28:

AAPA, in view of **Vandiver** does not explicitly teach authentication procedures that utilize wireless access performed with a proximity card, the proximity card absent electrical wires and an internal power source. **Shima** teaches in an analogous art a wireless access control system, where a proximity card carried by a user is accessed by a surveillance control unit installed at the gate of a building or the like, and information such as personal data on the user or user's identity is read wirelessly to effect a certain control such as on-off control to lock or unlock the door of a room (authentication procedures that utilize wireless access performed with a proximity card). **Shima** also

teaches in an access control system using a proximity card without any power supply, the surveillance control unit produces an inductive electromagnetic field, which is received by the coil of the signal reception antenna on the proximity card and the voltage induced in the coil is rectified to create operating power (this process is called "magnetic coupling") (the proximity card absent electrical wires and an internal power source). (Col. 1, 16-50; Fig. 1 and discussion therein).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify **AAPA's** traditional digital fault recorder (DFR) and sequence of events (SOE) recorder 22 to be able to use **Shima's** proximity card 2, reader/writer 1, antenna equipment 3 and card antenna 4. The artisan would be motivated to do so because it would afford **AAPA's** recorder 22 a higher level of security, limiting access of the contents to someone in possession of **Shima's** proximity card 2. The artisan would be motivated to do so because the use of proximity card are common in the art and a person with ordinary skill in the art would have good reason to pursue the known options within his or her technical grasp.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN J. TABONE JR whose telephone number is (571)272-3827. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JACQUES H. LOUIS JACQUES can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cynthia Britt/
Primary Examiner, Art Unit 2117

/John J. Tabone, Jr./
Examiner
Art Unit 2117 11/15/2008